

Amendments to the CLAIMS:

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

LISTING OF CLAIMS:

1-11. (Canceled).

12. (Previously Presented) A method for shifting an instant of commutation for a sensorless and brushless direct-current motor including stator windings fed by a multi-phase converter connection, comprising the steps of:

detecting the instant of commutation by comparing a voltage induced in a stator winding phase in which no current is applied to a reference voltage;

changing the reference voltage in dependence upon at least one of a setpoint value of a rotational speed of the direct-current motor and a manipulated variable calculated from the setpoint value; and

shifting the instant of commutation such that the reference voltage is raised in a shape of a parabola.

13. (Previously Presented) The method according to claim 12, wherein:

with respect to a pulse width modulation of a current supplied to the stator windings, the parabola-shaped raising of the reference voltage begins at a pulse width modulation ratio of about 90 to 95%.

14. (Previously Presented) The method according to claim 13, wherein:

the pulse width modulation ratio is 93%.

15. (Currently Amended) The method according to claim 12, further comprising the step of:

adapting a current supply to individual stator winding phases in accordance with the manipulated variable in order to one of raise and lower the current supply accordingly.

16. (Canceled).

17. (Previously Presented) A system for shifting an instant of commutation, comprising:
- a multi-stage converter connection, including:
 - an output stage control,
 - a commutation logic,
 - a phase selector, and
 - a phase discriminator;
 - a sensorless and brushless direct-current motor fed by the multi-stage converter connection;
 - a commutation detection element, including:
 - a first input supplied by the phase selector with an instantaneous value of a voltage induced in a non-energized phase, and
 - a second input supplied with a reference voltage for comparison;
 - a commutation shift element for changing the reference voltage in accordance with a specific curve, wherein in the commutation shift element, the reference voltage is changed in accordance with a parabola; and
 - a manipulated-variable calculation element for supplying a manipulated variable to the commutation shift element as a function of a setpoint speed of the direct-current motor.
18. (Previously Presented) The system according to claim 17, wherein:
- the reference voltage is increased.
19. (Previously Presented) The system according to claim 17, wherein:
- with respect to a pulse width modulation of a current supply to individual stator winding phases of the direct-current motor, the reference voltage is increased in a parabola shape, starting from a pulse width modulation ratio of about 90 to 95%.
20. (Previously Presented) The system according to claim 19, wherein:
- the pulse width modulation ratio is 93%.
21. (Previously Presented) A system for shifting an instant of commutation, comprising:
- a multi-stage converter connection, including:

an output stage control,
a commutation logic,
a phase selector, and
a phase discriminator;
a sensorless and brushless direct-current motor fed by the multi-stage converter connection;
a commutation detection element, including:
a first input supplied by the phase selector with an instantaneous value of a voltage induced in a non-energized phase, and
a second input supplied with a reference voltage for comparison;
a commutation shift element for changing the reference voltage in accordance with a specific curve; and
a manipulated-variable calculation element for supplying a manipulated variable to the commutation shift element as a function of a setpoint speed of the direct-current motor, wherein the manipulated-variable calculation element computes the manipulated variable as a non-linear function of the setpoint speed of the direct-current motor, and the manipulated variable is fed, on the one hand, as an input to the commutation shift element, and, on the other hand, to the commutation logic to adapt a current supply to stator winding phases of the direct-current motor.